

*Överum Nivell*



Instruction manual  
Mounting instruction  
Spare parts list

## Description of function

The integrated furrow leveller is available for CX 3 and 4 furrow ploughs with hydraulic stone trip system. The furrow leveller is based on the Multi Flex system with flex tines and different wearing parts. The vibrating flex tines level the furrows directly in connection to the ploughing. The working angle of the flex tines and the cultivating result can be adjusted on the go.

The hydraulically folded arm is used for lifting the Nivell up over the plough to transport position. The transport position is also used when the first pass along the field edge is ploughed.

**Note !** Do not reverse the plough with the furrow leveller in transport position.

## Mounting

The Nivell consists of three main parts: Mounting bracket, arm and furrow leveller.

The mounting bracket is mounted over the first beam housing and bolted on to the bracket for the furrow press arm. Mount the arm with the furrow leveller on to the mounting bracket.

Shut-off valve



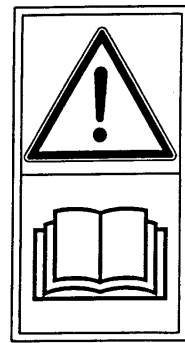
## SAFETY PRECAUTIONS

### Warning symbols

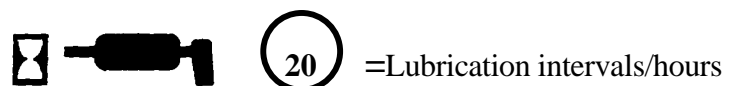
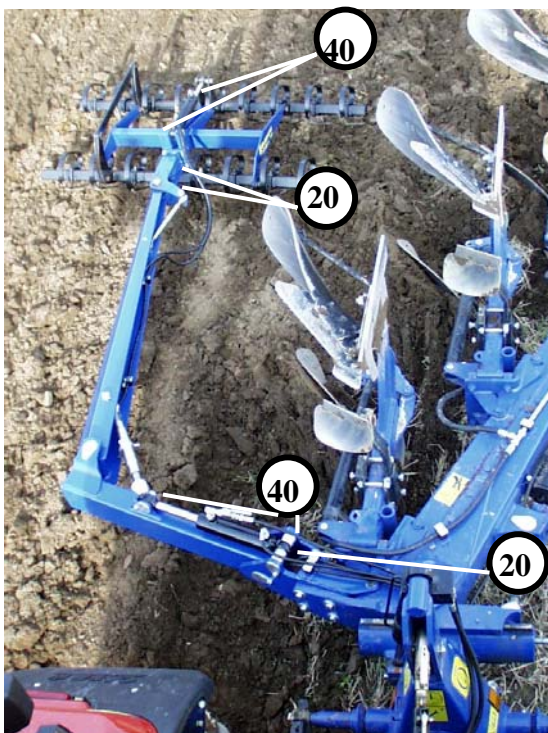
The symbols can be found in the instruction manual of the plough. It is a warning that personal injuries can occur unless the safety precautions given are followed. Avoid accidents by following these safety precautions.

Carefully read through this Instruction Manual and observe the warning text given here and on the machine.

- Ensure that no person is on, underneath or in the hazardous area of the plough during transport, ploughing or the turn-over action of the plough.
- Operator competence. The operator must be well acquainted with the different functions of the plough and be knowledgeable of how to operate it with safety.
- Ensure that the plough is locked with the correct locking pins onto the three-point linkage on the tractor.
- Secure the lower link stabilizers on the tractor when the plough is transported on the road.
- This chapter is a summary of the rules, which must always be followed when working with the plough. These rules however do not exempt the operator from the responsibility to observe relevant statutory or other national regulations dealing with road safety or labour safety issues.



### Lubrication intervals



## INSTRUCTION

### Transport position and ploughing the first pass along the field edge.

- Reverse the plough so that the right hand plough bottoms can be used.
- Lift the plough so that the Nivell is lifted out of the ground.
- Operate the hydraulic cylinder on the Nivell arm so that the Nivell is lifted over the plough up to transport position, see pictures below. During transport driving the shut-off valve on the cylinder must be closed.
- Reduce the forward speed when ploughing the outer part of the headlands with the Nivell hanging on top of the plough.
- When the Nivell arm is in working position the shut-off valve should be closed.



Ploughing the outer part of the headland



Nivell in transport position

### Adjustment of the position

- Adjust the turnbuckle **A** so that a 3-furrow plough leaves 2 furrows untouched and a 4-furrow plough 3 furrows untouched.

### Adjustment of the angle

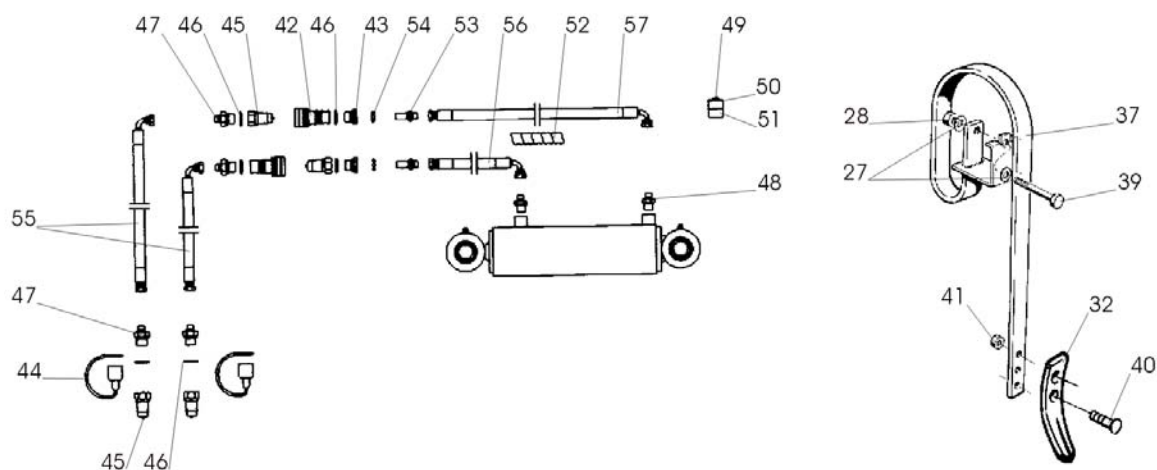
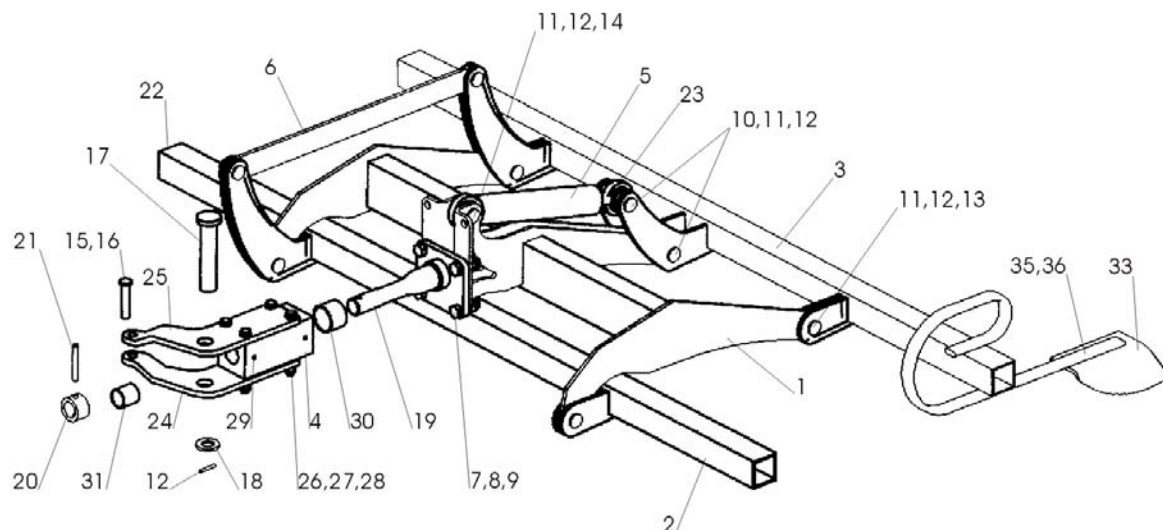
- The Nivell should point out towards the ploughed land  $< 5^\circ$ , this reduces the pressure on the landsides. Adjust the angle of the Nivell using the turnbuckle **B**.



### Adjustment of the working pressure

- Weight can be transferred over from the plough to the Nivell, this is adjusted by the hydraulic cylinder **C**. The cylinder is operated from a double acting outlet from the tractor. If the working pressure on the Nivell is set to high it can affect the ploughing. When ploughing with constant high working pressure on the Nivell it can be necessary to adjust the vertical setting of the plough so that it leans slightly against the Nivell.

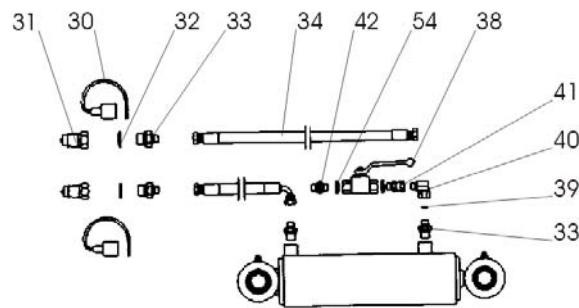
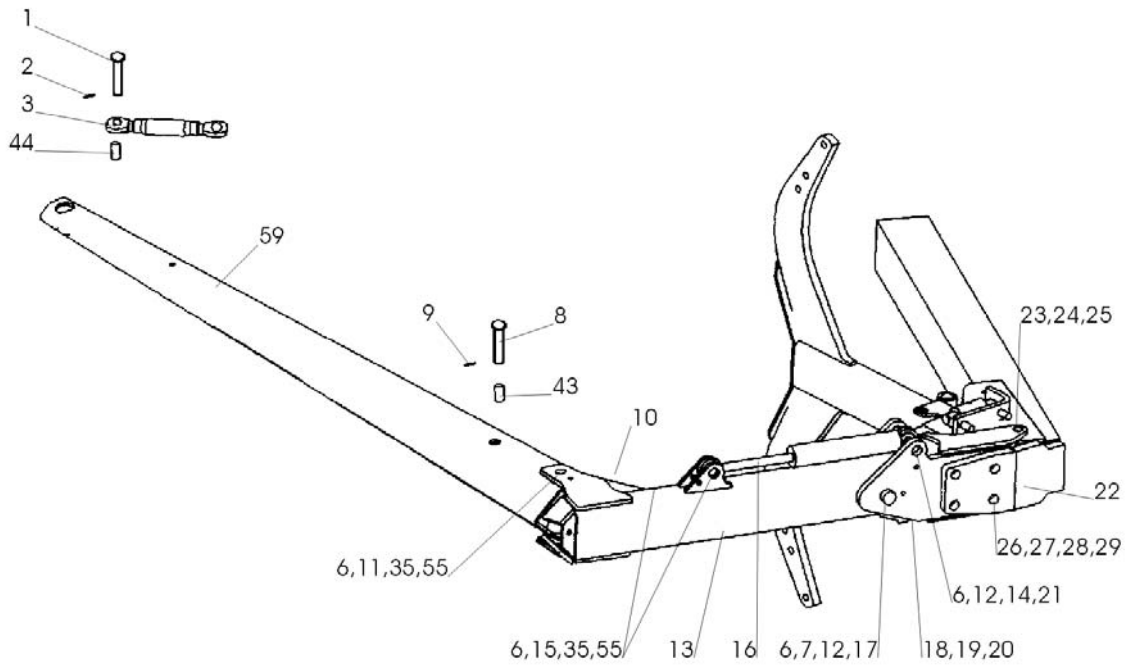




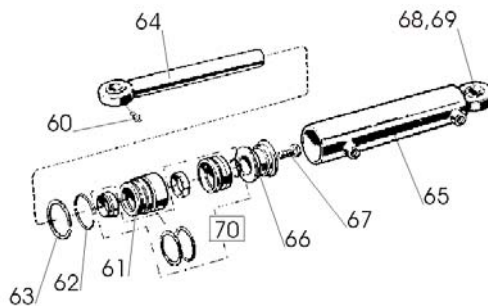
302

Pos nr Pos.Nr Ref.No. Fig.Nº.	Detalj nr Best.Nr Part No. Code Nº.	Benämning	Bezeichnung	Description	Description
302		<b>NIVELL</b>	<b>NIVELL</b>	<b>NIVELL</b>	<b>NIVELL</b>
1	1652 13 39 90	Ram	Rahmen	Main frame	Châssis-poutre
2	1652 13 55 50	Främre pinnbalk	Vorders zinkenbalken	Front balk	Poutre
	1652 13 41 50	Främre pinnbalk	Vorders zinkenbalken	Front balk	Poutre
3	1652 13 54 50	Bakre pinnbalk	Hinteres zinkenbalker	Back balk	Poutre
	1652 13 40 50	Bakre pinnbalk	Hinteres zinkenbalker	Back balk	Poutre
4	1652 14 08 90	Lagerhus	Lagergehäuse	Bearing housing	Palier de roulement
5	1651 11 62 04	Cylinder	Zylinder	Cylinder	Vérin
6	1652 13 50 50	Stag	Stütze	Bar stay	Barre de tension
7	734 11 86 01	BRB 17x30	Scheibe	Washer	Rondelle
8	732 21 24 51	M6M 16	Nyloc-Mutter	Lock nut	Ecrou freiné
9	725 26 30 51	M6S 16x50	Schraube	Bolt	Vis
10	1659 96 26 00	Cylindrisk bult	Zylinderbolzen	Pivot pin	Cheville

Pos nr Pos.Nr Ref.No. Fig.Nº.	Detalj nr Best.Nr Part No. Code Nº.	Benämning	Bezeichnung	Description	Description	
<b>302</b>			<b>NIVELL</b>	<b>NIVELL</b>	<b>NIVELL</b>	<b>NIVELL</b>
11	734 12 00 07	BRB 26x45	Bricka	Scheibe	Washer	Rondelle
12	721 43 47 01	FRP 6x40	Rörpinne	Hohlstift	Tension pin	Goupille cannelée
13	1652 16 29 00	25x42	Cylindrisk bult	Zylinderbolzen	Pivot pin	Cheville
14	1659 12 69 00	25x62	Cylindrisk bult	Zylinderbolzen	Pivot pin	Cheville
15	1658 97 89 00	16x75	Cylindrisk bult	Zylinderbolzen	Pivot pin	Cheville
16	1658 57 63 00		Härnålssprint	Haltefeder	Lock spring	Goupille
17	1658 54 67 00	30x128	Cylindrisk bult	Zylinderbolzen	Pivot pin	Cheville
18	734 12 04 01	BRB 31x56	Bricka	Scheibe	Washer	Rondelle
19	1652 13 53 90		Vridaxel	Drehwelle	Turn-over axle	Axe de retournement
20	1652 14 10 90		Ring	Ring	Ring	Bague
21	721 44 57 01	FRP 12x50	Rörpinne	Hohlstift	Tension pin	Goupille cannelée
22	1659 93 26 00		Plastplugg	Kunststoffpfropfen	Plastic plug	Bouchon plastique
23	1652 16 36 00		Hylsa	Hülse	Sleeve	Manchon
24	1652 14 06 90		Fästplatta höger	Befestigungsplatte	Mounting plate	Plaque fixation
25	1652 14 07 90		Fästplatta vänster	Befestigungsplatte	Mounting plate	Plaque fixation
26	725 25 58 51	M6S 12x130	Skruv	Schraube	Bolt	Vis
27	734 11 78 01	BRB 13x24	Bricka	Scheibe	Washer	Rondelle
28	732 21 22 51	M6M 12	Låsmutter	Nyloc-Mutter	Lock nut	Ecrou freiné
29	738 88 20 03	AHKR 1/8"	Smörjnippel	Schmiernippel	Grease nipple	Graisser
30	1659 73 71 00		Glidlager	Gleitlager	Plain bearing	Coussinet
31	1659 94 09 00		Glidlager	Gleitlager	Plain bearing	Coussinet
32	1651 29 89 19		Harvspets	Spitze	Point	Pointe
33	1652 13 57 50		Vinkelplatta höger	Platte rechts	Plate right	Plaque droite
	1652 13 58 50		Vinkelplatta vänster	Platte links	Plate left	Plaque gauche
35	1650 36 12 21	MFBKF 12x29	Skruv	Schraube	Bolt	Vis
36	1650 36 13 03	M6M 12	Mutter	Mutter	Nut	Ecrou
37	1652 03 91 50		Flexpinne	Stift	Pin	Goupille
38	1659 67 62 50		Pinnfäste	Federhalter	Anchor pin	Attache de goupille
39	725 25 52 57	M6S 12x100	Skruv	Schraube	Bolt	Vis
40	1650 36 01 12	MFBF 10x30	Skruv	Schraube	Bolt	Vis
41	731 23 20 07	M6M 10	Mutter	Mutter	Nut	Ecrou
42	1657 48 15 00		Snabbkoppling	Schnellkupplung	Quick coupler	Raccord rapide
43	1658 33 61 00		Adapt	Verbindungsstück	Union	Raccord
44	1657 83 83 00		Handelsskydd	Schutz	Guard	Protection
45	1657 48 14 00		Snabbkoppling	Schnellkupplung	Quick coupler	Raccord rapide
46	1658 03 16 00		Tättningsbricka	Dichtungsscheibe	Sealing washer	Rondelle d'étanchéité
47	1657 72 31 00		Adapt	Verbindungsstück	Union	Raccord
48	1659 35 74 00		Adapt	Verbindungsstück	Union	Raccord
49	725 23 76 51	M6S 6x35	Skruv	Schraube	Bolt	Vis
50	1659 12 05 00		Täckplatta	Platte	Covering plate	Plaque couvercle
51	1659 42 90 00		Rörklammer	Röhrenklammer	Tube clamp	Crochet de fixation
52	1659 28 76 00		Plastspiral	Schlauchhalter	Hose collector	Spiral plastique
53	1651 77 84 00		Skottgenomgång	Verbindungsstück	Union	Raccord
54	1651 77 85 00		Mutter	Mutter	Nut	Ecrou
55	1651 52 93 00	L=3500	Slang	Schlauch	Hose	Tuyau flexible
56	1651 66 10 20	L=2180	Slang	Schlauch	Hose	Tuyau flexible
57	1651 46 36 00	L=2600	Slang	Schlauch	Hose	Tuyau flexible
	1652 27 98 00	L=2400	Slang	Schlauch	Hose	Tuyau flexible
	1659 91 34 00	L=2800	Slang	Schlauch	Hose	Tuyau flexible



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Pos nr Pos.Nr Ref.No. Fig.Nº.	Detalj nr Best.Nr Part No. Code Nº.	Benämning	Bezeichnung	Description	Description
345		<b>NIVELL ARM</b>	<b>NIVELL ARM</b>	<b>NIVELL ARM</b>	<b>NIVELL BRAS</b>
1	1659 45 43 00	∅ 16 Cylindrisk bult	Zylinderbolzen	Pivot pin	Cheville
2	721 42 62 01	FRP 4x32 Rörpinne	Hohlstift	Tension pin	Goupille cannelée
3	1652 16 43 00	Vantskruv	Spannschloss	Turnbuckle	Ecrou-tendeur
6	734 11 78 01	BRB 13x24 Bricka	Scheibe	Washer	Rondelle
7	1659 89 08 00	Kronmutter	Kronenmutter	Castellated nut	
8	1659 19 16 00	∅ 30 Cylindrisk bult	Zylinderbolzen	Pivot pin	Ecrou crénelé
9	721 44 19 01	FRP 10x40 Rörpinne	Hohlstift	Tension pin	Cheville
10	1659 59 16 00	Vantskruv	Spannschloss	Turnbuckle	Goupille cannelée

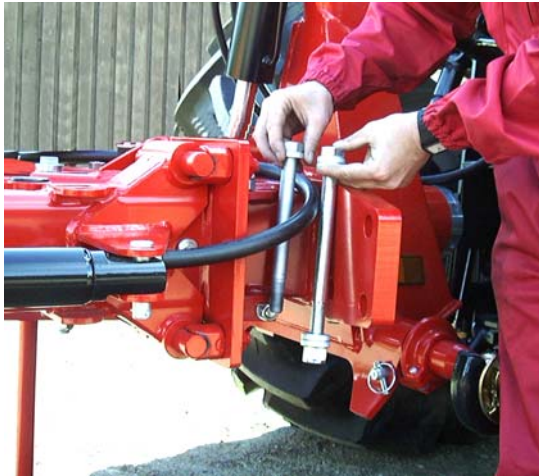
Pos nr Pos.Nr Ref.No. Fig.Nº.	Detalj nr Best.Nr Part No. Code Nº.		Benämning	Bezeichnung	Description	Description
345			<b>NIVELL ARM</b>	<b>NIVELL ARM</b>	<b>NIVELL ARM</b>	<b>NIVELL BRAS</b>
11	1652 17 94 00		Låstapp	Zylinderbolzen	Pivot pin	Cheville
12	725 25 32 51	M6S 12x20	Skruv	Schraube	Bolt	Vis
13	1652 17 80 90		Infällningsarm	Einstellarm	Adjustment arm	Bras de réglage
14	1652 17 95 00		Låstapp	Zylinderbolzen	Pivot pin	Cheville
15	1659 62 98 00		Låstapp	Zylinderbolzen	Pivot pin	Cheville
16	1659 43 71 50		Hydraulcylinder	Hydr.Zylinder	Hydr.cylinder	Vérin
17	1652 17 96 00		Låstapp	Zylinderbolzen	Pivot pin	Cheville
18	1658 57 79 00		Friktionsfjäder	Reibungsfeder	Friction spring	Ressort de friction
19	1658 56 93 00		Skruv	Schraube	Bolt	Vis
20	738 88 80 03	CM 8x1,25	Smörjnippel	Schmiernippel	Grease nipple	Graisser
21	1652 17 97 00		Distans	Distanz	Spacing	Entretoise
22	1652 17 93 90		Arminfästning	Halter	Holder	Support
23	725 27 01 81	M6S 20x240	Skruv	Schraube	Bolt	Vis
24	1658 35 87 00		Bricka	Scheibe	Washer	Rondelle
25	1650 36 50 07	M6M 20	Mutter	Mutter	Nut	Ecrou
26	1658 64 33 00	BRB 17x30	Bricka	Scheibe	Washer	Rondelle
27	725 26 36 81	M6S 16x80	Skruv	Schraube	Bolt	Vis
28	732 21 24 51	M6M 16	Mutter	Mutter	Nut	Ecrou
29	1658 62 40 02	FRP 28x50	Rörpinne	Hohlstift	Tension pin	Goupille cannelée
30	1657 83 83 00		Handelsskydd	Schutz	Guard	Protection
31	1657 48 14 00		Snabbkoppling	Schnellkupplung	Quick coupler	Raccord rapide
32	1658 03 16 00		Tätningbricka	Dichtungsscheibe	Sealing washer	Rondelle d'étanchéité
33	1657 72 31 00		Adapt	Verbindungsstück	Union	Raccord
34	1657 72 35 00	L=2490	Slang	Schlauch	Hose	Tuyau flexible
35	725 25 36 51	M6S 12x30	Skruv	Schraube	Bolt	Vis
37	1651 46 36 00	L=2600	Slang	Schlauch	Hose	Tuyau flexible
38	1658 40 96 00		Avstängningsventil	Absperrventil	Shut of valve	Soupape d'arrêt
39	1657 72 27 00		Strypbricka	Drosselscheibe	Trottle washer	Re stricteur
40	1658 56 36 00		Adapt	Verbindungsstück	Union	Raccord
41	1659 45 77 00		Adapt	Verbindungsstück	Union	Raccord
43	1652 23 27 00	D50/30,2-48	Hylsa	Hülse	Sleeve	Manchon
44	1652 23 28 00	D25/16,,5-25	Hylsa	Hülse	Sleeve	Manchon
49	721 43 87 01	FRP 8x60	Rörpinne	Hohlstift	Tension pin	Goupille cannelée
54	1651 29 83 01		Tätningbricka	Dichtungsscheibe	Sealing washer	Rondelle d'étanchéité
55	732 21 22 51	M6M 12	Låsmutter	Nyloc-Mutter	Lock nut	Ecrou freiné
59	1652 24 03 92		Kort arm	Kurz arm	Short arm	Court bras
	1652 24 03 91		Arm	Arm	Arm	Bras
60	738 88 10 01	AHM6	Smörjnippel	Schmiernippel	Grease nipple	Graisser
61	1658 65 58 00		Styrning	Führung	Guide	Guidage
62	1658 65 49 00		Låsring	Kopfring	Lock ring	Bague d'arrêt
63	1658 65 50 00		Låsringshalvor	Sicherungsring	Lock ring	Bague d'arrêt
64	1659 44 12 00		Kolvstång	Kolbenstange	Piston rod	Tige de piston
65	1659 44 15 00		Cylinderrör	Zylindermantel	Cylinder jacket	Corps de vérin
66	1658 65 56 00		Kolv	Kolben	Piston	Piston
67	725 26 74 51	M6S 20x50	Skruv	Schraube	Bolt	Vis
68	1658 64 05 02		Ledlager	Rotule	Bearing	Palier
69	735 31 40 11	SgH 47	Låsring	Kopfring	Lock ring	Bague d'arrêt
70	1658 69 84 00		Packningssats	Packungsgarnitur	Set of seals	Jeu de joints



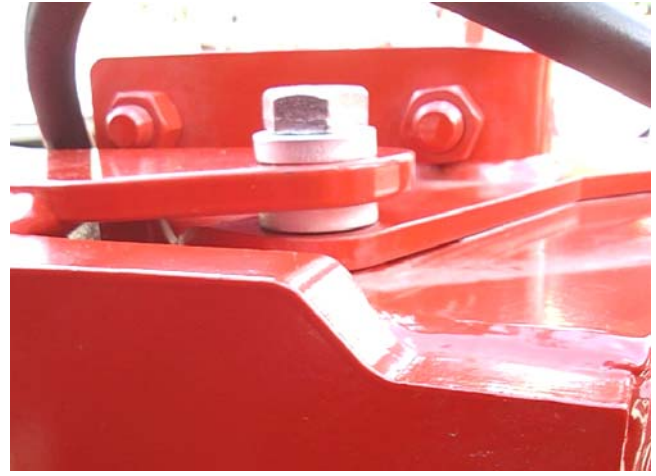
1. Split the parts in the pallet and check that all parts are included.



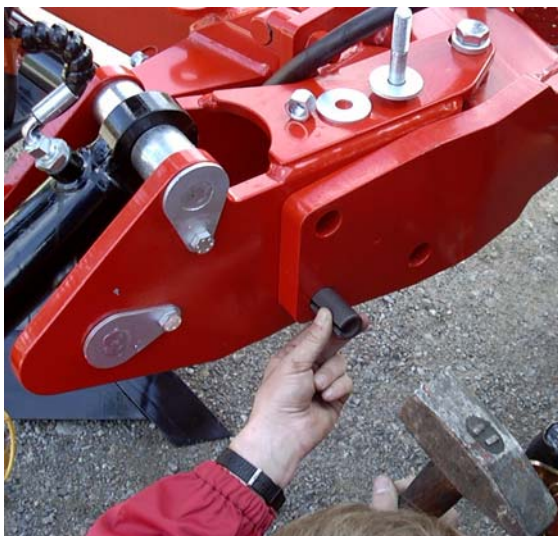
2. Mount the bracket over the front beam housing and to the front furrow press mounting plate.



3. Change the front bolt for the beam housing to a longer model



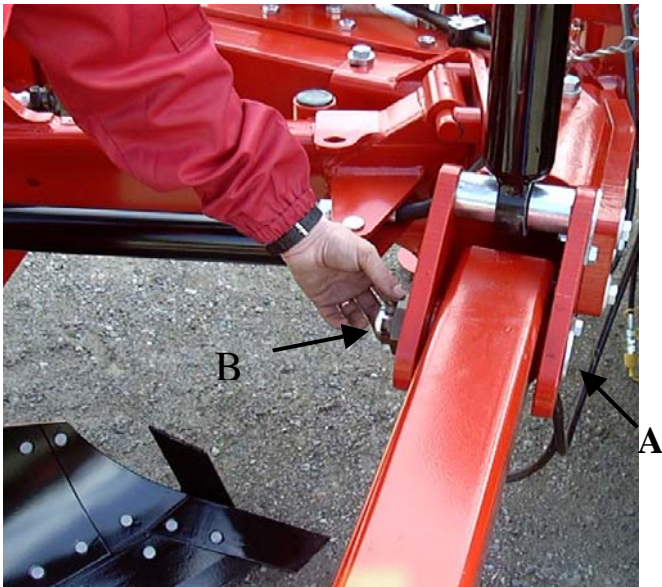
4. Mount washers under and on top of the bracket. Mount and tighten the bolt.



5. Knock in tension pins three or four (Depends on year of manufactory). Mount washers, bolts and nuts.



6. Mount the arm to the bracket.



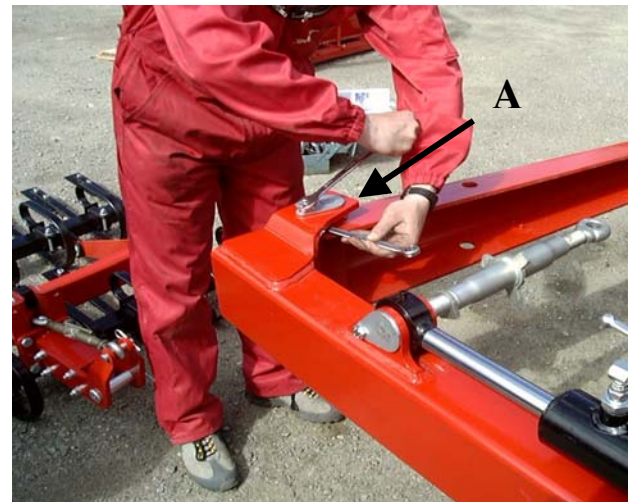
7. Mount the large pin (A), the washer and nut (B).  
Tighten and lock with a tension pin.



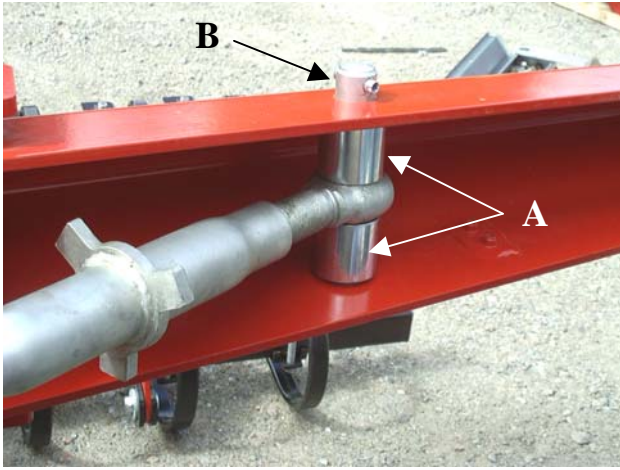
8. Mount the hydraulic cylinder.



9. Mount the outer arm.



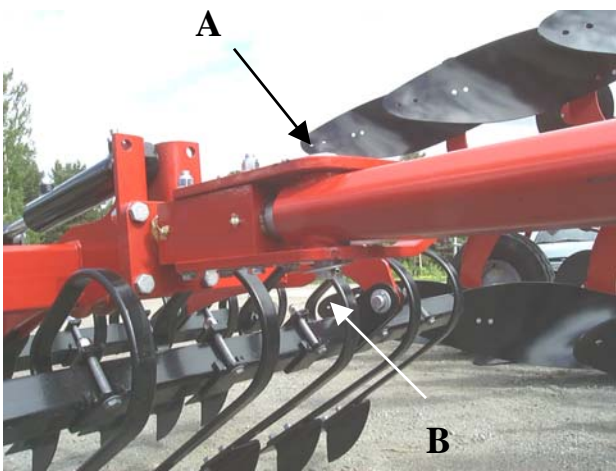
10. Mount the large pin (A) and secure with a bolt and nut.



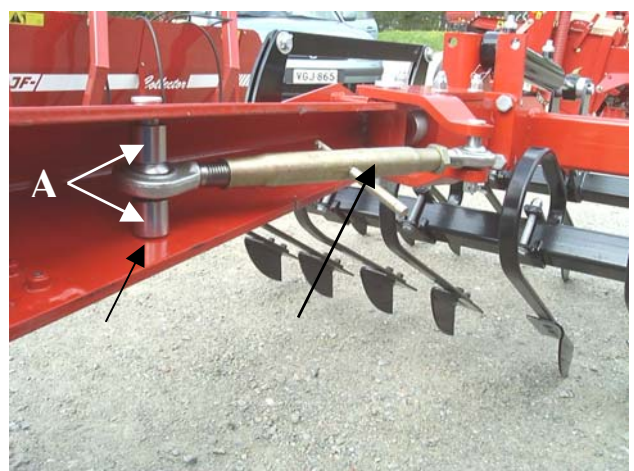
11. Mount the turnbuckle. Make sure that the spacer sleeves (A) are mounted. Lock with a tension pin (B)



12. Mount the furrow leveler.



13. Mount the pin (A) and lock with the tension pin (B)



14. Mount the small turnbuckle and check that the spacer sleeves (A) are in place. Lock with tension pin (B). Knock the handle (C) through the hole in the turnbuckle.



15. Mount the hydraulic hoses from the cylinder forwards to the unions.



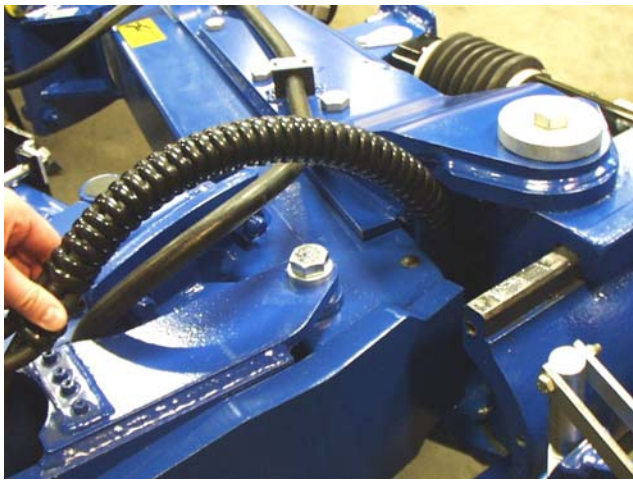
16. Put the hoses on the inside of the pins for the turnbuckles.



17. Mount the hydraulic hoses to the unions mounted in the front arm.



18. Bolt the hoses with clamps according to the picture above.



19. Dismount the male quick couplings from the hoses and put them through the turn over arm. Mount the quick couplings and make sure that the restrictor washers are properly mounted.





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